

# Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

## Certificate Of Analysis

### Sample Identification Information

Date of Analysis 3/23/2023  
Sample: S1868  
Product Name INSTANT CEREMONIAL  
Lot# VBE2303-IC3

Country of Origin VANUATU  
Country of Processing USA  
Manufacture Date Feb-23  
Best By Date Feb-26

### General Product Specifications

Product Species Piper Methysticum  
Part Used Root

Common Names Kava kava, Awa, Yagona  
Appearance Yellow, beige powder

### Analyzed Characteristics

#### Specification

#### Result

#### Test Method

<u>Standardization</u>	2-17% Kavalactones	4.73%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	PASS	HPLC
<u>Mesh Size</u>	60-30	60	Sieve
<u>Color</u>	Beige to Yellow	Pass	Visual
<u>Odor</u>		Pass	Organoleptic
<u>Taste</u>		Pass	Organoleptic
<u>Chemotype</u>		243561	HPLC
<u>K/DHM</u>		1.9	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2297.961			
Methysticin	M	1	2.21	336.754	8.80%	0.43%	6
Dihydromethysticin	DHM	2	3.38	315.872	8.26%	0.59%	5
Kavain	K	3	1	1937.251	50.63%	1.12%	4
Dihydrokavain	DHK	4	3.08	662.06	17.30%	1.61%	2
Desmethoxyyangonin	DMY	5	2.52	244.537	6.39%	0.39%	1
Yangonin	Y	6	3.12	329.522	8.61%	0.60%	3
<b>Kavalactones</b>			<b>Total:</b>	<b>3825.996</b>	<b>100.00%</b>	<b>4.73%</b>	<b>243561</b>

\*See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

This result are in house tested and the best of our knowledge and experience. Using calibrated equipment.

We are dedicated to offer the best Quality of Botanical products on the market. We test and stand behind our products.

Disclaimer\* the test results are accurate to the best of our knowledge and are based upon reputable laboratory and industry standard testing methods.

These results should not be used as a final determination for use in a finished product. It is recommended that you verify these test results with an in house quality control department or obtain an additional independent third party lab to verify that this material meets specifications

Botany Evolution, its board of directors, contract laboratories, employees, and affiliates are held harmless from any loss or damages resulting from the use or misuse of this document. The appropriate use of this product is the sole responsibility of the user of the purchasing party.

Chemist

*Mustel Youngs* 3/28/23

Date

SAMPLE S1868  
Vial 21

.75126g/50mL

wavelength 246 nm

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EQUENCE C:\CHEM32\1\DATA\KAVA\_03\_23\_2023\_ ->

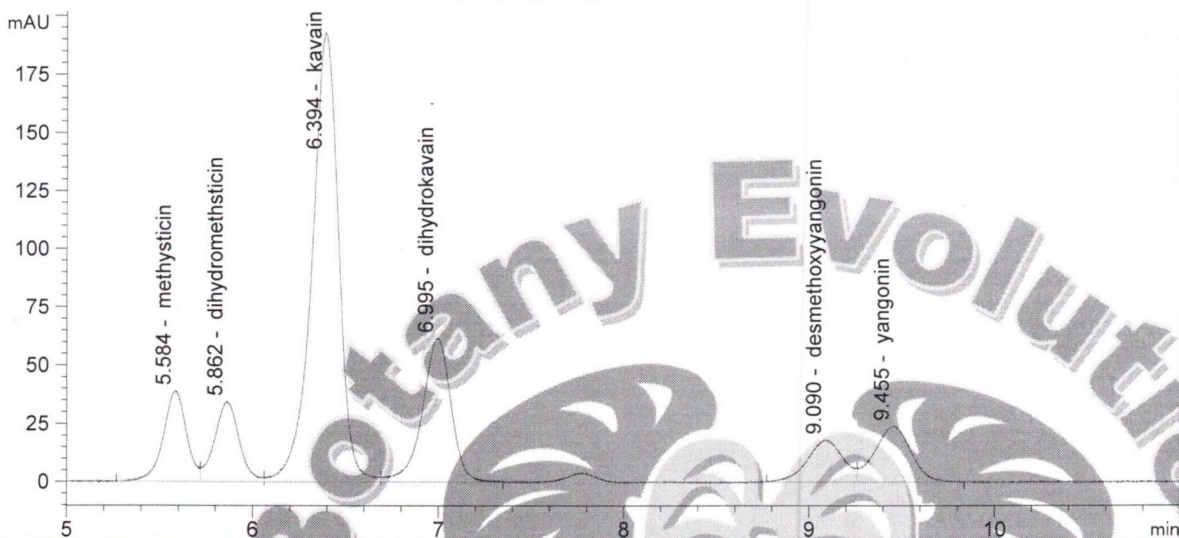
Injection date 3/23/2023

Injection time 11:30:44 PM

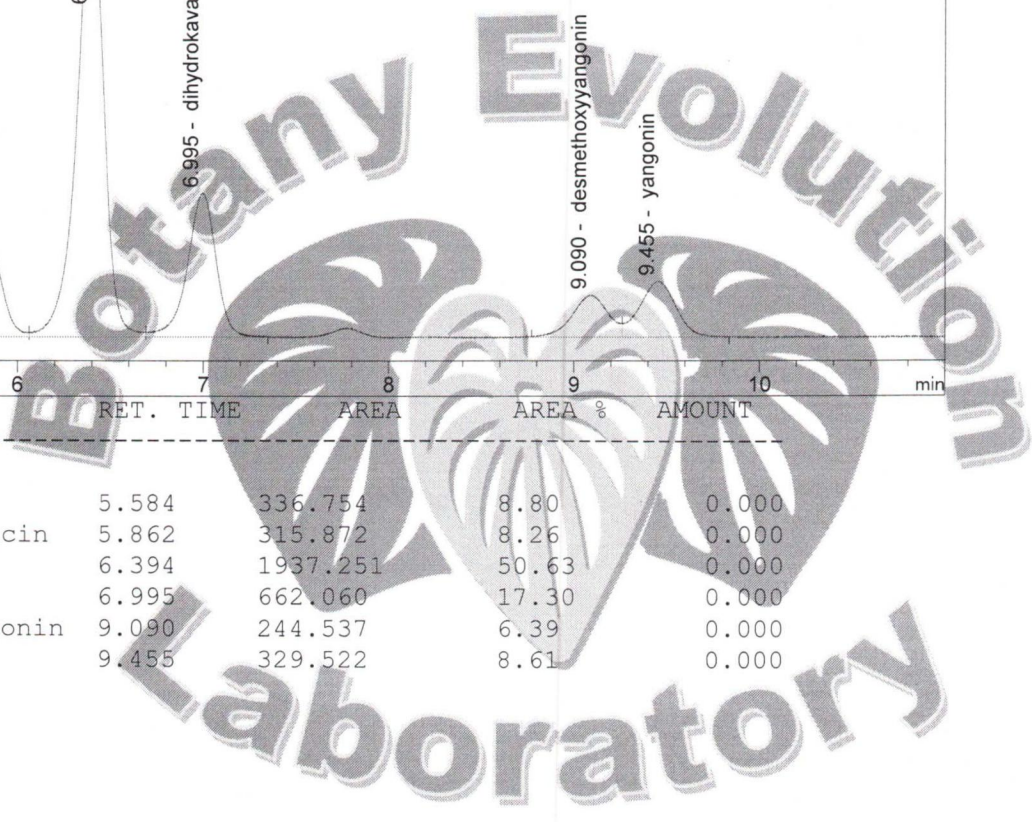
Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_03\_23\_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_03\_23\_2023\_15MINSTDTESTMETHOD 2023-03-23 17-02-21\021-2101.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.584	336.754	8.80	0.000
2	dihydromethsticin	5.862	315.872	8.26	0.000
3	kavain	6.394	1937.251	50.63	0.000
4	dihydrokavain	6.995	662.060	17.30	0.000
5	desmethoxyyangonin	9.090	244.537	6.39	0.000
6	yangonin	9.455	329.522	8.61	0.000



3/24/23  
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